

Research Article

DOI: <http://dx.doi.org/10.22192/ijamr.2018.05.01.002>

## *In vitro* screening of a siddha drug Parangi Rasayanam for its antifungal property.

Suvetha C<sup>1\*</sup>, Vanitha A<sup>2</sup>, Seethalakshmi G<sup>3</sup>

<sup>1</sup>PG Scholar, M.Sc, Public Health; The Tamilnadu Dr.M.G.R Medical University, Chennai.

<sup>2</sup>residential Medical Officer, Department of Kuzhanthai Maruthuvam, National Institute of Siddha, Chennai.

<sup>3</sup>Residential Medical Officer, Department of Sool Magalir Maruthuvam, National Institute of Siddha, Chennai.

\*Corresponding Author

### Abstract

#### Keywords

Parangirasayanam, antifungal activity, disc diffusion method, siddha drug.

The siddha system is the oldest systems of medicine in India. The aim of the study is to assess the antifungal activity of the siddha drug parangirasayanam (PR). In the present study, the fungicidal activity of PR was evaluated for potential antifungal activity against medically important fungal strains. The antifungal activity was determined in the PR using agar disc diffusion method, were tested against *Aspergillus flavus*, *Aspergillus niger* and *Pencillium* sp.

#### Article History:

Received 5 December 2017; Received in revised form 25 December 2017; Accepted 2 January 2018; Published 20 January 2018.

### Introduction

People all over the world are still affected by quite a large number of fungal infections. Antifungal drugs are the weapons to fighting fungal infections and also beneficial in human life. Siddha system of medicine

plays a significant role in the prevention and treatment of human disease. It is one of the primary health care systems. In this way, PR is one of the potent antifungal drug. It's also give the beneficial effect in kapha disease, ulcers, pain, goiter, vatha disease, leucorrhoea and syphilis.

## Materials and Methods

47 g of Sabouraud dextrose agar medium (Hi Media) was suspended in 1000 ml of distilled water. The medium was dissolved completely by boiling and was then autoclaved at 15 lbs pressure (121°C, pH 5.6 ± 0.2) for 15 min. Antibiotic susceptibility tests were determined by agar disc diffusion (Kirby–Bauer) method. About 20 ml of sterile molten Sabouraud Dextrose Agar (HiMedia Laboratories Pvt. Limited, Mumbai, India) was poured into sterile petriplates. The plates were swabbed with the overnight culture (10<sup>8</sup> cells/mL) of pathogenic fungi viz. *A. niger*, *A.flavus*, *Penicillium sps*. Finally, The sample or

Sample loaded Disc was then placed on the surface of Sabouraud dextrose agar and the plates were kept for incubation at 22°C for 48 hours. At the end of incubation, inhibition zones were examined around the disc and measured with transparent ruler in millimeters. The size of the zone of inhibition (including disc) was measured in millimeters. The absence of zone inhibition was interpreted as the absence of activity (Kohner et al., 1994; Mathabe et al., 2006). The activities are expressed as resistant, if the zone of inhibition was less than 7 mm, intermediate (8-10 mm) and sensitive if more than 11 mm (Assam et al., 2010).

## Results

### Antifungal activity report

S.No	Organisms	Extract (mm)	Positive control (mm) Flucanazole
1	<i>Aspergillus flavus</i>	8	17
2	<i>Aspergillus niger</i>	-	19
3	<i>Pencillium sp</i>	-	27



## Conclusion

The Antifungal sensitivity screening of parangirasayanam reveals the actual report obtained from the result against *Aspergillus flavus*. The purpose of the study to provide scientific validation of the siddha drug for their anti fungal property. It will be helpful to carried out for further more researches.

## References

- 1.Dr.Murugesu Muthaliyar, siddha Materia Medica (vegetable section), volume1,fourth edition 1988, publisher; Tamilnadu siddha medical council, Chennai.
- 2.HasdayJD,ShahN,et al. fever,hyperthermia and the lung : its all about context and timing. Trans Am clinclimatol Assoc.2011:122:34-47.
- 3.Dr.K.M.Nadkarani, Indian Materia Medica vol:1 Publisher: popular prakash,Mumbai,india.
- 4.Dr.K.N-Kuppuswami muthaliyarH.P.I.M,Dr.K.S.Uthamarayan H.P.I.M-Siddha vaithiyathiratu-Indian medicine and homeopathy dept Chennai-106.

Access this Article in Online	
	Website: <a href="http://www.ijarm.com">www.ijarm.com</a>
	Subject: <a href="#">Siddha Medicine</a>
Quick Response Code	
DOI: <a href="https://doi.org/10.22192/ijamr.2018.05.01.002">10.22192/ijamr.2018.05.01.002</a>	

### How to cite this article:

Suvetha C, Vanitha A, Seethalakshmi G. (2018). *In vitro* screening of a siddha drug Parangi Rasayanam for its antifungal property. Int. J. Adv. Multidiscip. Res. 5(1): 10-12.

DOI: <http://dx.doi.org/10.22192/ijamr.2018.05.01.002>